

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

100. (Previously Presented) A system for distributing energy comprising:

(a) a station including:

- (i) a first port for coupling to a supply of water or fluid constituents of water;
- (ii) a first port controller coupled to the first port for connecting to an energy supply source for controlling the flow of energy through the first port;

(b) a hydrogen fuel cell device including:

- (i) a second port for coupling the first port to the device;
- (ii) an on-board fuel plant capable of selectively coupling to the second port for storing and/or producing hydrogen fuel using electricity and water supplied thereto;
- (iii) a second controller coupled to the on-board fuel plant; and

one of the first port controller and the second controller for controlling an aspect of the exchange of one of electricity, water and fluid constituents of water with device.

101. (Previously Presented) A system as claimed in claim 100 wherein the one of the first port controller and second controller includes a data port for coupling to a data network.

102. (Previously Presented) A system as claimed in claim 101 wherein the one of the first port controller or second controller includes a first power switch for one of directing electricity to the first port and routing electricity from the first port.

103. (Previously Presented) A system as claimed in claim 102 wherein the one of the first port controller and second controller includes a first module for operating the first switch responsive to data received via the data network.

104. (Previously Presented) A system as claimed in claim 103 wherein the data network includes at least one network controller for exchanging data with the one of the first port controller and second controller.

105. (Previously Presented) A system as claimed in claim 100 wherein the one of the first port controller and second controller includes a data port for coupling to a data network.

106. (Previously Presented) A system as claimed in claim 105 wherein the data received relates to at least one energy service provider.

107. (Previously Presented) A system as claimed in claim 106 wherein the data includes data concerning electricity price.

108. (Previously Presented) A system as claimed in claim 107 wherein the electricity price relates price to time-of-day.

109. (Previously Presented) A system as claimed in claim 108 wherein the data network includes at least one network controller for exchanging data with the one of the first port controller and second controller.

110. (Previously Presented) A system as claimed in claim 100 wherein the one of the first port controller and second controller includes a data port for coupling to a data network

111. (Previously Presented) A system as claimed in claim 110 wherein the one of the first port controller and the second controller includes a second module for controlling hydrogen production in dependence upon a first electricity price point.

112. (Previously Presented) A system as claimed in claim 111 wherein the second module is also for controlling electricity production by the fuel cell device in dependence upon a second electricity price point.

113. (Previously Presented) A system as claimed in claim 112 wherein the first electricity price point is lower than the second electricity price point.

114. (Previously Presented) A system as claimed in claim 113 wherein the data network includes at least one network controller for exchanging data with the one of the first port controller and second controller.

115. (Previously Presented) A system as claimed in claim 100 wherein the one of the first port controller and second controller includes a data port for coupling to a data network

116. (Previously Presented) A system as claimed in claim 115 wherein the one of the first port controller and second controller includes a third module for monitoring status of hydrogen storage.

117. (Previously Presented) A system as claimed in claim 116 wherein the data network includes at least one network controller for exchanging data with the one of the first port controller and second controller.

118. (Previously Presented) A system as claimed in claim 117 wherein the third module includes a communications module for transferring hydrogen storage status data to the network controller.

119. (Previously Presented) A system as claimed in claim 100 further comprising a data link between the first and second controllers.

120. (Previously Presented) A system as claimed in claim 119 wherein the one of the first port controller and second controller includes a data port for coupling to a data network.

121. (Previously Presented) A system as claimed in claim 120 wherein the data network includes at least one network controller for exchanging data with the one of the first port.

122. (Previously Presented) A system for distribution of energy comprising:  
a station including a first port for coupling to a supply of water or fluid constituents of water; and

a first port controller coupled to the first port for connecting to an energy supply source for controlling the flow of energy through the first port;

first port to the device, an on-board fuel plant capable of selectively coupling to the second port for storing and/or producing hydrogen fuel using electricity and water supplied thereto, and a second controller coupled to the on-board fuel plant;

one of the first port controller and the second controller for controlling an aspect of the exchange of one of electricity, water and fluid constituents of water with device.

123. (Previously Presented) A system for distribution of energy comprising:  
a station including a first port for coupling to a supply of water or fluid constituents of water, a first port controller coupled to the first port and for coupling to an energy supply source for controlling the flow of energy through the first port; and

a connector coupled the first port and for coupling to a hydrogen fuel cell device including a second port for coupling the first connector to the device, an on-board fuel plant capable of selectively coupling to the second port for storing and/or producing hydrogen fuel using electricity and water supplied thereto and a second controller coupled to the on-board fuel plant;

one of the first port controller and the second controller for controlling an aspect of the exchange of one of electricity, water and fluid constituents of water with device.

124. (Previously Presented) A system for distribution of energy comprising:  
a hydrogen fuel cell device including an internal port, an on-board fuel plant capable of selectively coupling to the internal port for storing and/or producing hydrogen fuel using electricity and water supplied thereto, the internal port for coupling the hydrogen fuel cell device to a station including an external port for coupling to a supply of water or fluid constituents of water, an external port controller coupled to the external port for connecting to an energy supply source for controlling the flow of energy through the external port;

the external port for coupling to the internal port and one of the internal and external controller for controlling an aspect of the exchange of electricity, water and/or fluid constituent of water with the device.

125. (Previously Presented) A system for distributing energy comprising:  
a hydrogen fuel cell device including an internal port, an on-board fuel plant capable of selectively coupling to the internal port for storing and/or producing hydrogen fuel using electricity and water supplied thereto, the internal port for coupling the hydrogen fuel cell device to a station including an external port for coupling to a supply of water or fluid constituents of water, an external port controller coupled to the external port for connecting to an energy supply source for controlling the flow of energy through the external port; and  
a connector connected to the internal port coupling and for coupling the internal port to the external port;

one of the internal and external controller for controlling an aspect of the exchange of electricity, water and/or fluid constituent of water with the device.